

---

# Il *Work and Meaning Inventory* (WAMI) all'università

## *Proprietà psicometriche della versione italiana per studenti universitari*

---

Annamaria Di Fabio<sup>1</sup> e Maureen E. Kenny<sup>2</sup>

### Sommario

L'obiettivo del presente lavoro è di esaminare le proprietà psicometriche della versione italiana del *Work and Meaning Inventory* (WAMI) per utilizzarla nel contesto italiano con studenti universitari. La versione italiana del WAMI per studenti universitari è stata somministrata a 283 partecipanti. Sono state analizzate dimensionalità, attendibilità e validità concorrente. L'analisi fattoriale confermativa ha confermato la versione a tre dimensioni. La coerenza interna e la validità concorrente sono soddisfacenti. I risultati mostrano che la versione italiana del WAMI per studenti universitari risulta una misura valida e attendibile per valutare il *meaning* anche nel contesto italiano con studenti universitari.

### Parole chiave

*Meaning*, proprietà psicometriche, versione italiana del *Work and Meaning Inventory* (WAMI) per studenti universitari.

---

<sup>1</sup> Department of Education, Languages, Intercultures, Literatures and Psychology (Psychology Section), University of Florence.

<sup>2</sup> Lynch School of Education and Human Development, Boston College, Chestnut Hill, MA, USA.

---

# The *Work and Meaning Inventory* (WAMI) at university

## *Psychometric properties of the Italian version for university students*

---

Annamaria Di Fabio<sup>1</sup> and Maureen E. Kenny<sup>2</sup>

### Abstract

The aim of this study was to examine the psychometric properties of the Italian version of the *Work and Meaning Inventory* (WAMI) for use in the Italian context among university students. The Italian version of the WAMI for university students was administered to 283 participants. Dimensionality, reliability, and concurrent validity were analyzed. Confirmatory factor analysis confirmed a three-dimensional structure. Internal consistency and concurrent validity were satisfactory. Results suggest that the Italian version of the WAMI for university students is a valid and reliable measure for evaluating meaning among students attending university in Italy.

### Keywords

Meaning, psychometric properties, Italian version of the *Work and Meaning Inventory* (WAMI) for university students.

---

<sup>1</sup> Department of Education, Languages, Intercultures, Literatures and Psychology (Psychology Section), University of Florence.

<sup>2</sup> Lynch School of Education and Human Development, Boston College, Chestnut Hill, MA, USA.

Current times are characterized by high levels of uncertainty, insecurity and continuous change that can decenter our lives and sense of purpose (Blustein et al., 2019). Being able to derive a sense of meaning in the context of change may be fundamental for facing the challenges of the 21<sup>st</sup> century (Di Fabio & Blustein, 2016; Duffy, Autin, & Bott, 2015). The need for a paradigm shift was noted by Di Fabio & Blustein (2016), in which the construction of authentic meaning, purpose and connection among individuals and communities overrides a focus on individual motivation (Di Fabio & Blustein, 2016). In the present unpredictable world of work, the issue of meaningful work is increasingly vital for workers' well-being and the health of organizations (Di Fabio, 2017; Di Fabio, & Bernaud, 2018; Di Fabio & Kenny, 2019; Di Fabio 2020; Di Fabio & Peiró, 2018; Peiró et al., 2020; Duffy et al., 2016). Meaningful work has been understood as a multidimensional construct that comprises centrality of work, working values, and intrinsic orientation to work (Roberson, 1990). Research has found meaningful work to be associated with engagement (Britt et al., 2001; Britt et al., 2007), good earnings and reputation (Oscós-Sánchez & Oscós-Flores, 2008).

Building on this conceptualization, Steger et al. (2012) introduced a multidimensional model that includes the positive meaning generated by one's work and the perception of work as offering wider benefits for oneself and the surrounding environment. The *Work as Meaning Inventory* (WAMI; Steger et al., 2012) was developed to assess the meaning that people attribute to work and their perception of its positive value and significance. The WAMI includes three dimensions of meaningful work: Positive meaning at work, Meaning making through work, and Greater good motivation. Positive meaning at work refers to the meaning and importance that individuals attribute to what they do at work; Meaning making through work refers to the meaning that work can generate across one's professional and personal life, fostering professional and personal growth through enhanced understanding of the self and the surrounding environment; Greater good motivation refers to a desire to have positive effects through one's work on others and the surrounding environment.

In research using the WAMI, work meaning was found to be positively associated with workers' well-being in terms of hedonic well-being, including both job satisfaction and life satisfaction (Steger et al., 2012) and in terms of eudaimonic well-being, including life meaning (Bernaud, 2015, 2016; Steger et al., 2012) and flourishing (Di Fabio, 2018; Magnano et al., 2019). These findings underline the contribution of work meaning to optimal functioning, self-fulfillment, personal growth, self-acceptance, competence and autonomy (Ryff & Singer, 2008).

Primary prevention (Di Fabio & Kenny, 2015, 2016; Hage et al., 2007) from a strength-based perspective (Di Fabio & Saklofske, 2020) highlights the value of building resources that enable individuals to face the complexity of contemporary life in ways that promote well-being.

From a prevention perspective, understanding and fostering the development of meaning prior to workforce entry may be important for university students. In order to promote research on work meaning at the university level, Di Fabio and Kenny adapted the WAMI for university students. Thus, the aim of the present study is to assess the psychometric properties of the Italian version of the *Work and Meaning Inventory* (WAMI) for use in the Italian context among university students.

## Method

### *Participants*

Questionnaires were administered to 283 university students in Tuscany Region (58.90% were female and 41.10% were males; mean age = 24.08 years,  $SD = 2.21$ ).

### *Measures*

*Work as Meaning Inventory for university students.* The Italian version *Work as Meaning Inventory* (WAMI) for students by Di Fabio and Kenny was used. The inventory is composed of 10 items with response format on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. It includes three dimensions that parallel those of the WAMI. Examples of items are: «I have a good sense of what makes my study meaningful» for Positive meaning; «I view my study as contributing to my personal growth» for Meaning making through study; «I know my study makes a positive difference in the world» for Greater good motivations. The Work as Meaning Inventory for university students was developed modifying the Italian version (Di Fabio, 2018) of the Work as Meaning Inventory for workers (Steger et al., 2012). The psychometric properties of the Italian version of WAMI for workers (Di Fabio, 2018) have been already established, supporting its validity and reliability with workers in the Italian context. We revised the items of the Italian version of WAMI for workers, substituting «work» with «study» where necessary.

*Meaningful Life Measure.* Meaning in life was assessed using the Italian version (Di Fabio, 2014) of the Meaningful Life Measure (MLM, Morgan & Farsides, 2009). The 23-item MLM has five dimensions: Exciting life (example of item: «My life interests and excites me»), Accomplished life (example of item: «I find it satisfying to think about what I have accomplished in life»), Principled life (example of item: «The beliefs I hold about the world enable me to make sense out of my existence»), Purposeful life (example of item: «I have a clear idea of

what my future goals and aims are»), Valued life, (example of item: «My life is worthwhile»). Item response options on a 7-point Likert scale range from 1 = *strongly disagree* to 7 = *strongly agree*. The Cronbach's alpha coefficients ranged from .87 for Accomplished life to .84 for Valued life. The validity of the MLM and its dimensions was adequate (Di Fabio, 2014).

*Flourishing Scale.* The Italian version (Di Fabio, 2016) of the 8-item Flourishing Scale (Diener et al., 2010) was used to evaluate flourishing. Items response options on a 7-point Likert scale range from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Examples of items: «I lead a purposeful and meaningful life», «My social relationships are supportive and rewarding», «I actively contribute to the happiness and well-being of others». The reliability of the scale was  $\alpha = .88$ . Concurrent validity was adequate (Di Fabio, 2016).

### Procedure

The instruments were administered collectively by specialized personnel according to the Italian privacy and informed consent law. The sequence of administration was counterbalanced to monitor the possible effects of questionnaire order.

### Data Analysis

The factor structure of the Italian version of the WAMI for university students was verified through Confirmatory Factor Analysis (CFA) (maximum likelihood method) using AMOS version 6 (Arbuckle, 2005). The fit of the empirical data to the model was evaluated using five different indices: the ratio between chi-square and degree of freedom ( $\chi^2/df$ ), the *Comparative Fit Index* (CFI, Bentler, 1990), the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973), the *Root Mean Square Error of Approximation* (RMSEA, Browne & Cudeck, 1993), and the *Standardized Root Mean Square Residual* (SRMSR, Bentler, 1995). Ratio ( $\chi^2/df$ ) values between 1 and 3 are considered indicators of a good fit (Byrne, 1989; Carmines & McIver, 1981; Marsh & Hocevar, 1985). For the *Comparative Fit Index* (CFI, Bentler, 1990) and the *Tucker-Lewis Index* (TLI; Tucker & Lewis, 1973) values of greater than .90 indicate a good fit (Bentler, 1990). Values below .08 indicate a good fit to the model (Browne, 1990) for the *Root Mean Square Error of Approximation* (RMSEA, Browne & Cudeck, 1993), the *Standardized Root Mean Square Residual* (SRMSR, Bentler, 1995), the *Root Mean Square Error of Approximation* (RMSEA, Browne & Cudeck, 1993) and the *Standardized Root Mean Square Residual* (SRMSR, Bentler, 1995). The reliability of the Italian version of WAMI for university students was evaluated using the Cronbach's alpha coefficient and concurrent validity was assessed through computation of Pearson  $r$  correlations with the MLM and FS to assess the relationship of the WAMI for university students with eudaimonic well-being.

## Results

The factor structure of the Italian version (Di Fabio & Kenny) for students of the WAMI was verified through a Confirmatory Factor Analysis. Table 1 reported the indices of Goodness of Fit.

**Table 1**

Confirmatory Factor Analysis: *Goodness of Fit*

WAMI for university students	$\chi^2/df$	SRMSR	RMSEA	TLI	CFI
	2.27	.06	.07 (LC: .06; .08)	.92	.91

The obtained indices verify a three-dimensional structure for the measure.

With regard to reliability, Cronbach's coefficient alphas were .82 for Positive meaning, .80 for Meaning making through study, .80 for Greater good motivation, and .81 for total score.

The correlations of the Italian version of WAMI for students with the MLM and FS are showed in table 2.

**Table 2**

Correlation of the WAMI for students with the MLM and FS

	MLM	FS
WAMI for university students Total	.51**	.54**
Positive Meaning	.54**	.55**
Meaning making through study	.47**	.52**
Grater good motivation	.30**	.39**

$N = 283$ . \*\*  $p < .01$ .

## Discussion

The aim of the present work was to present initial data for the validation of the Italian version of the Work and Meaning Inventory (WAMI) for university students by Di Fabio and Kenny.

The adequacy of the three-dimensional model, consistent with structure of the original WAMI (Steger et al., 2012) and the Italian version of the WAMI for university students, was verified through Confirmatory Factor Analysis. The reliability of the inventory for use with Italian university students was supported by the Cronbach's alpha coefficients for the three scales and the total score. Positive correlations of the Italian version of WAMI for students with MLM and FS support the concurrent validity of the scale as related to aspects of eudaimonic well-being. The finding that meaningful work as related to academic study is associated with greater life meaning (Morgan & Farsides, 2009) and flourishing (Diener et al., 2010) among university students highlights the relationships found in previous studies with workers (Di Fabio, 2018; Steger et al., 2012) that linked meaningful work with different aspects of eudaimonic well-being, life meaning and psychological growth and prosperity. The emerging relationships between meaningful work, meaningful life and flourishing has important implications for strength-based primary prevention (Di Fabio & Kenny, 2016; Di Fabio et al., 2016; Di Fabio & Saklofske, 2020). More specifically, the findings point to the benefits of fostering a sense of work meaning among university students in relation to their studies, which may serve as a psychological resource and precursor to the successful construction of a meaningful professional and personal life.

Despite the results of the present study indicating that the WAMI is a reliable and valid instrument to measure meaning of university students in the Italian context, it is important to underline the limitation of the present study which verified the psychometric properties of this instrument only with university students in the Tuscany Region, who are not representative of the country at large. Future research should therefore include students from other geographic areas in Italy. Future research might also assess the psychometric properties of the WAMI with high school students, as an examination of the benefits of meaning in one's studies are relevant for younger students as well. Future longitudinal research will also be important to determine whether work meaning as assessed among students is related to work meaning and eudaimonic well-being among individuals in the workforce.

Despite the highlighted limitations, the Italian version of the WAMI for university students was found to be an instrument capable of accurately evaluating meaning in the Italian context.

The availability of this scale opens future possibilities for research and intervention in the Italian context in a primary prevention (Di Fabio & Kenny, 2015, 2016, 2018; Hage et al., 2007; Kenny & Hage, 2009) and strength-based prevention perspectives (Di Fabio & Saklofske, 2020) for promoting the well-being of university students.

## Bibliography

- Arbuckle, J. L. (2005). *Amos 6.0 user's guide*. Chicago, IL: SPSS.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. doi: 10.1037/0033-2909.107.2.238
- Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software.
- Bernaudo, J.-L. (2015). *Psychologie de L'accompagnement: Concepts et Outils pour Développer le Sens de la vie et du Travail*. Paris: Dunod.
- Bernaudo, J.-L. (2016). Le «sens de la vie» comme paradigme pour le conseil en orientation. *Psychologie Française*, 61, 61-72. doi: 10.1016/j.psfr.2013.06.004.
- Blustein, D.L., Kenny, M. E., Di Fabio, A., & Guichard, J. (2019). Expanding the impact of the psychology of working: Engaging psychology in the struggle for decent work and human rights. *Journal of Career Assessment*, 27, 3-28. doi: 10.1177/1069072718774002
- Britt, T. W., Adler, A. B., & Bartone, P. T. (2001). Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. *Journal of Occupational Health Psychology*, 6, 53-63. doi: 10.1037/1076-8998.6.1.53
- Britt, T. W., Dickinson, J. M., Moore, D. M., Castro, C. A., & Adler, A. B. (2007). Correlates and consequences of morale versus depression under stressful conditions. *Journal of Occupational Health Psychology*, 12, 34-47. doi: 10.1037/1076-8998.12.1.34
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162).
- Byrne, B. M. (1989). *A primer of LISREL: Basic applications and programming for confirmatory factor analytic models*. Heidelberg: Springer.
- Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables. In G. W. Bohrnstedt & E. F. Borgotta (Eds.), *Social measurement: Current issues*, 80, 65-115. Sage.
- Di Fabio, A., & Saklofske, D. H. (2020). The relationship of compassion and self-compassion with personality and emotional intelligence. PAID 40th anniversary special issue. *Personality and Individual Differences*, 157. doi: 10.1016/j.paid.2020.110109
- Di Fabio, A. (2014). Meaningful life measure: primo contributo alla validazione della versione italiana [Meaningful life measure: first contribution to the validation of the Italian version]. *Counseling. Giornale Italiano Ricerca Applicazioni*, 7, 307-315.
- Di Fabio, A. (2016). *Flourishing Scale*: Primo contributo alla validazione della versione italiana [Flourishing Scale: First contribution to the validation of the Italian version] *Counseling. Giornale Italiano di Ricerca e Applicazioni*, 9(1). doi: 10.14605/CS911606
- Di Fabio, A. (2017). Positive Healthy Organizations: Promoting well-being, meaningfulness, and sustainability in organizations. *Frontiers in Psychology. Organizational Psychology*, 8, 1938. doi: 10.3389/fpsyg.2017.01938
- Di Fabio, A. (2018). The work and meaning inventory (WAMI): Primo contributo alla validazione della versione italiana. [The work and meaning inventory (WAMI): First contribution to the validation of the Italian version]. *Counseling. Giornale Italiano di Ricerca e Applicazioni*, 11(1). doi: 10.14605/CS1111808
- Di Fabio, A., & Bernaudo, J.-L. (Eds.). (2018). *Narrative Interventions in Post-modern Guidance and Career Counseling: Innovative Qualitative Approaches, Accountability, and Case Studies*. Heidelberg: Springer.
- Di Fabio, A., & Blustein, D. L. (2016). Editorial. In A. Di Fabio & D. L. Blustein (Eds.), Ebook Research Topic «From Meaning of Working to Meaningful Lives: The Challenges of Expanding Decent Work» in *Frontiers in Psychology. Organizational Psychology*, 7, 1119. doi: 10.3389/fpsyg.2016.01119



- Di Fabio, A., & Kenny, E. M. (2016). From decent work to decent lives: Positive Self and Relational Management (PS&RM) in the twenty-first century. *Frontiers in Psychology. Section Organizational Psychology*, 7, 361. doi: 10.3389/fpsyg.2016.00361
- Di Fabio, A., & Kenny, M. E. (2015). The contributions of emotional intelligence and social support for adaptive career progress among Italian youth. *Journal of Career Development*, 42, 48-59. doi: 10.1177/0894845314533420
- Di Fabio, A., & Kenny, M. E. (2018). Intrapreneurial Self-Capital: A Key Resource for Promoting Well-Being in a Shifting Work Landscape. *Sustainability*, 10(9), 3035. doi: 10.3390/su10093035
- Di Fabio, A., & Kenny, M. E. (2019). Resources for enhancing employee and organizational well-being beyond personality traits: The promise of Emotional Intelligence and Positive Relational Management. *Personality and Individual Differences* (Special Issue Personality, Individual Differences and Healthy Organizations), 151, doi: 10.1016/j.paid.2019.02.022
- Di Fabio, A., & Peiró, J. M. (2018). Human Capital Sustainability Leadership to promote sustainable development and healthy organizations: A new scale. *Sustainability*, 10(7), 2413. doi: 10.3390/su10072413
- Di Fabio, A., Cheung, F., & Peiró, J- M. (2020). Special Issue Personality and individual differences and healthy organizations. *Personality and Individual Differences*. <https://www.sciencedirect.com/journal/personality-and-individual-differences/special-issue/10TL3GMH68M>
- Di Fabio, A., Kenny, M. E., & Claudius, M. (2017). Preventing distress and promoting psychological well-being in uncertain times through career management intervention. In M. Israellashvili & J. L. Romano (Eds.), *The Cambridge handbook of international prevention science* (pp. 233-254). Cambridge University Press.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. doi: 10.1007/s11205-009-9493-y
- Duffy, R. D., Autin, K. L., & Bott, E. M. (2015). Work volition and job satisfaction: Examining the role of work meaning and person-environment fit. *The Career Development Quarterly*, 63(2), 126-140. doi: 10.1002/cdq.12009
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, 63(2), 127-148. doi: 10.1037/cou0000140
- Hage, S. M., Romano, J. L., Conynne, R. K., Kenny, M., Matthews, C., Schwartz, J. P., & Waldo, M. (2007). Best practice guidelines on prevention practice, research, training, and social advocacy for psychologists. *The Counseling Psychologist*, 35(4), 493-566. doi: 10.1177/0011000006291411
- Kenny, M. E., & Hage, S. M. (2009). The next frontier: Prevention as an instrument of social justice. *The Journal of Primary Prevention*, 30(1), 1-10. doi: 10.1007/s10935-008-0163-7
- Magnano, P., Santisi, G., Zammitti, A., Zarbo, R., & Di Nuovo, S. (2019). Self-perceived employability and meaningful work: the mediating role of courage on quality of life. *Sustainability*, 11(3), 764. doi: 10.3390/su11030764
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First — and higher — order factor models and their invariance across group. *Psychological Bulletin*, 97(3), 562-582. doi: 10.1037/0033-2909.97.3.562
- Morgan, J., & Farsides, T. (2009). Measuring meaning in life. *Journal of Happiness Studies*, 10(2), 197-214. doi: 10.1007/s10902-007-9075-0
- Oscos-Sanchez, M. A., Oscos-Flores, L. D., & Burge, S. K. (2008). The Teen Medical Academy: Using academic enhancement and instructional enrichment to address ethnic disparities in the American healthcare workforce. *Journal of Adolescent Health*, 42, 284-293. doi: 10.1016/j.jadohealth.2007.08.023
- Peiró, J. M., Bayonab, J. A., Caballer, A., & Di Fabio, A. (2020). Importance of work characteristics affects job performance: The mediating

- role of individual dispositions on the work design-performance relationships. *PAID 40th Anniversary Special Issue. Personality and Individual Differences*, 157. doi: 10.1016/j.paid.2019.109808
- Roberson, L. (1990). Functions of work meanings in organizations: Work meanings and work motivation. In A. Brief & W. Nord (Eds.), *Meanings of occupational work: A collection of essays* (107-134). Lexington Books.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13-39. doi: 10.1007/s10902-006-9019-0
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment*, 20(3), 322-337. doi: 10.1177/1069072711436160
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10. doi: 10.1007/BF02291170